Ohio Grade 8

# LineUp With Math<sup>TM</sup> Alignment Academic Content Standards - Mathematics Grade-Level Indicators

## **Number, Number Sense and Operations Standard**

## Computation and Estimation

#### **Grade-Level Indicator**

6. Estimate, compute and solve problems involving rational numbers, including ratio, proportion and percent, and judge the reasonableness of solutions.

# LineUp With Math<sup>TM</sup> Activities

- --Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.
- --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

### **Measurement Standard**

#### Use Measurement Techniques and Tools

#### **Grade-Level Indicator**

- 6. Solve and determine the reasonableness of the results for problems involving rates and derived measurements, such as velocity and density, using formulas, models and graphs.
- LineUp With Math<sup>TM</sup> Activities
- --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
- --Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.
- 7. Apply proportional reasoning to solve problems involving indirect measurements or rates.
- --Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

## Patterns, Functions and Algebra Standard

### Analyze Change

#### **Grade-Level Indicator**

16. Use graphing calculators or computers to analyze change; e.g., interest compounded over time as a nonlinear growth pattern.

## LineUp With Math<sup>™</sup> Activities

--Use an interactive simulator to identify distance, rate, time conflicts in air traffic control problems and resolve the conflicts by varying plane speeds or changing plane routes.